

LOW POWER DUAL PROTOCOL TRANSCEIVER

ABSTRACT OF THE DISCLOSURE

The present invention discloses a low power spread spectrum transceiver capable of preserving power while selectively initiating data transmissions under a preferred spread spectrum protocol. The transceiver, while in a power preserving deep sleep mode, uses DSSS circuitry to periodically monitor a predetermined wideband frequency for a spreading code of a DSSS signal from a remote receiving unit. Upon receipt of the appropriate spreading signal, a limited data transmission can be initiated. The DSSS signal contains information that can be decoded and utilized to switch out of DSSS receiving mode and into FHSS communication or transmission mode, or an FHSS session can be initiated automatically upon receipt of an appropriate wake up signal. While in FHSS mode, FHSS encoded data at the end point device's transceiver is communicated to the remote receiving unit. At the completion of the data transfer, the transceiver returns to low power sleep mode and recommences DSSS monitoring.